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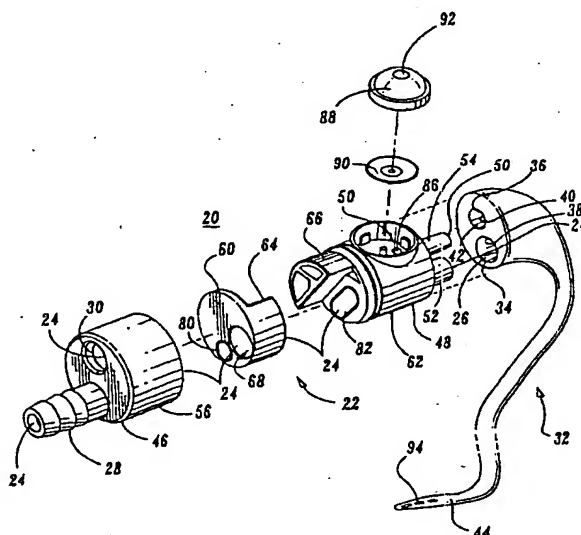
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[Continued on next page]

(54) Title: AUTOMATIC VALVE



(57) Abstract: A valve system (20) is provided having a housing including a first end (46), a second end (48) and a first passageway (26). The housing has a first port and a second port. A valve member (22) is disposed within the housing and movable relative thereto. The valve member (22) defines a portion of the first passageway (26) that includes a first opening configured for alignment and sealed fluid communication with the first port and the second port. The portion of the first passageway (26) further includes a second opening having a greater relative dimension than the first opening. The valve member (22) is manipulable to establish sealed fluid communication between the first opening and the first port or the second port while maintaining continuous sealed fluid communication between the second opening and the first passageway (26) adjacent to the second end (48) of the housing. The valve member (22) can be disposed within the housing for rotation relative thereto.

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European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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see PCT Gazette No. 30/2004 of 22 July 2004, Section II

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 03/34129

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A61M39/22

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No.             |
|------------|--|-----------------------------------|
| X          | US 3 957 082 A (LARSON WESLEY S ET AL)<br>18 May 1976 (1976-05-18)                 | 1-5, 12,<br>14, 19,<br>21, 23, 24 |
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| A          | figures 3-10   | 1                                 |
|            | — / —  |                                   |

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- "&" document member of the same patent family

Date of the actual completion of the international search

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## INTERNATIONAL SEARCH REPORT

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |   |                              |
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| Category *   | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.        |
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 03/34129

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-9,12-19,21,23-26

A valve housing supporting a button which has to be depressed to release the valve member to be turned.  
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2. claims: 10,11,20,22,27-29

A valve housing comprising a second passageway.  
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/34129

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Information on patent family members

Int. Application No

PCT/US 03/34129

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